

Abstract

There is described a system and method for automatically warming a grip surface, such as handlebars, of a vehicle in which the grip surface and a rider's hand are exposed to the elements. The system comprises: an electrical power source; a resistive heating element mounted to the grip surface for warming the grip surface; an automatic temperature controller comprising a switching means electrically connected in series between the power source and the heating element for switching power on and off to the heating element in response to a temperature feedback signal; and, a temperature sensor electrically connected to the temperature controller for providing the temperature feedback signal and mounted on the grip surface at an interface between the grip surface and the hand, the grip surface and the hand being exposed to the elements. The system is particularly useful for vehicles such as snowmobiles, snow throwers, ATV's and motorcycles. The temperature controller may comprise a circuit with a switched low resistance output to efficiently deliver power to the heating element. The system may use a variable pre-set reference in the circuit in conjunction with the temperature sensor to provide a comparative closed loop control of the grip surface's temperature, thus relieving the rider, especially the operator, of the necessity to manually adjust the temperature in response to changing conditions. Mounting of the temperature sensor on handlebars in an interface between the grip surface and the hand leads to more effective temperature control. The system increases the comfort and safety of the rider while reducing power consumption.